

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): An information communication apparatus comprising:
an information communication unit for transmitting and receiving information through communication;
a vibration notification unit for vibrating to notify the reception of the information;
and
a vibration control unit for generating from an audio signal a driving signal synchronously with the audio signal, the vibration control unit for causing the vibration notification unit to vibrate according to the driving signal.
2. (original): The information communication apparatus as claimed in claim 1, further comprising a music reproduction unit for outputting music as the audio signal.
3. (currently amended): The information communication ~~apparatuses~~apparatus as claimed in claim 2 wherein the vibration control unit generates the driving signal based on low frequency components of the audio signal.
4. (original): The information communication apparatus as claimed in claim 2 wherein the music reproduction unit stops music reproduction if the information communication unit receives the information during music reproduction.

5. (original): The information communication apparatus as claimed in claim 2 wherein the music reproduction unit comprises an incoming status detection unit for detecting start and completion of receiving the information; and

the music reproduction unit stops music reproduction when the incoming status detection unit detects that the information communication unit receives information, and restarts the music reproduction when the incoming status detection unit detects that the information communication unit completes receiving the information, if the information is received during music reproduction.

6. (original): The information communication apparatus as claimed in claim 3, wherein the vibration notification unit comprises a vibration unit for vibrating with a self-resonance frequency; and

wherein the vibration control unit comprises a low pass filter having a passing frequency band for passing the low frequency components including the self-resonance frequency of the vibration unit.

7. (original): The information communication apparatus as claimed in claim 3, wherein the vibration notification unit comprises a vibration unit for vibrating the information communication apparatus according to the driving signal; and

wherein the vibration control unit comprises a low pass filter having a passing frequency band for passing the low frequency components of the audio signal.

8. (original): The information communication apparatus as claimed in claim 7, wherein the vibration control unit further comprises an amplifier for amplifying the low frequency components passing through the low pass filter.

9. (original): The information communication apparatus as claimed in claim 8, wherein the vibration control unit further comprises a rectifier for rectifying the low frequency components output from the amplifier to generate the driving signal.

10. (original): The information communication apparatus as claimed in claim 2, wherein the information received by the information communication unit includes voice communication data from an external terminal and music data delivered from an external source.

11. (original): The information communication apparatus as claimed in claim 10, wherein the music reproduction unit outputs the music as the audio signal based on the music data delivered from the external source.

12. (original): The information communication apparatus as claimed in claim 10, further comprising a memory for storing the music data.

13. (currently amended): The information communication apparatus as claimed in claim 12, wherein the music reproduction unit generates and outputs the music as the audio signal based on the music ~~data~~data in the memory.

14. (original): The information communication apparatus as claimed in claim 1, further comprising a speaker for outputting the audio signal.

15. (new): A communication apparatus, comprising:
a receiver circuit that receives communication information;
a vibrator that vibrates to notify reception of the communication information; and
a control circuit that generates a driving signal based on an audio signal,
wherein the control circuit instructs the vibrator to vibrate according to the driving signal.

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Cont. 16. (new): The communication apparatus as claimed in claim 15, wherein the audio signal comprises music.

17. (new): The communication apparatus as claimed in claim 16, further comprising a memory that stores the music.

18. (new): The communication apparatus as claimed in claim 16, wherein the control circuit instructs the vibrator to vibrate based on low frequency components of the music.

19. (new): The communication apparatus as claimed in claim 15, further comprising:
a speaker,

wherein the audio signal is output via the speaker.

20. (new): The communication apparatus as claimed in claim 16, further comprising:

a speaker,

wherein the control circuit causes the music to be output via the speaker.

21. (new): The communication apparatus as claimed in claim 20, wherein the control circuit causes the music to stop being output via the speaker when the receiver circuit receives the communication information while the music is output via the speaker.

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22. (new): The communication apparatus as claimed in claim 21, wherein the control circuit detects a beginning of receipt of the communication information and a completion of the receipt of the communication information,

wherein the control circuit causes the music to stop being output via the speaker when the control circuit detects the beginning of the receipt of the communication information, and

wherein the control circuit causes the music to be output via the speaker when the control circuit detects the completion of the receipt of the communication information.

23. (new): The communication apparatus as claimed in claim 22, wherein, when the control circuit detects the completion of the receipt of the communication information, the control circuit causes the music to be output via the speaker from a point at which the music stopped being output via the speaker when the communication information began to be received.

24. (new): The communication apparatus as claimed in claim 15, wherein the vibrator vibrates with a resonance frequency,
wherein the control circuit comprises a filter that passes the resonance frequency, and
wherein the filter filters the audio signal.

25. (new): The communication apparatus as claimed in claim 18, wherein the vibrator vibrates with a resonance frequency,
wherein the control circuit comprises a low pass filter that passes the resonance
frequency, and
wherein the filter filters the music.

26. (new): The communication apparatus as claimed in claim 16, wherein the music is received over the air from an external source.

WHAT IS CLAIMED IS:

1. An information communication apparatus comprising:
an information communication unit for transmitting and receiving information through communication;
a vibration notification unit for vibrating to notify the reception of the information; and
a vibration control unit for generating from an audio signal a driving signal synchronously with the audio signal, the vibration control unit for causing the vibration notification unit to vibrate according to the driving signal.
2. The information communication apparatus as claimed in claim 1, further comprising a music reproduction unit for outputting music as the audio signal.
3. The information communication apparatuses as claimed in claim 2 wherein the vibration control unit generates the driving signal based on low frequency components of the audio signal.
4. The information communication apparatus as claimed in claim 2 wherein the music reproduction unit stops music reproduction if the information communication unit receives the information during music reproduction.

5. The information communication apparatus as claimed in claim 2 wherein the music reproduction unit comprises an incoming status detection unit for detecting start and completion of receiving the information; and

the music reproduction unit stops music reproduction when the incoming status detection unit detects that the information communication unit receives information, and restarts the music reproduction when the incoming status detection unit detects that the information communication unit completes receiving the information, if the information is received during music reproduction.

6. The information communication apparatus as claimed in claim 3, wherein the vibration notification unit comprises a vibration unit for vibrating with a self-resonance frequency; and

wherein the vibration control unit comprises a low pass filter having a passing frequency band for passing the low frequency components including the self-resonance frequency of the vibration unit.

7. The information communication apparatus as claimed in claim 3, wherein the vibration notification unit comprises a vibration unit for vibrating the information communication apparatus according to the driving signal; and

wherein the vibration control unit comprises a low pass filter having a passing frequency band for passing the low frequency components of the audio signal.

8. The information communication apparatus as claimed in claim 7, wherein the vibration control unit further comprises an amplifier for amplifying the low frequency components passing through the low pass filter.

9. The information communication apparatus as claimed in claim 8, wherein the vibration control unit further comprises a rectifier for rectifying the low frequency components output from the amplifier to generate the driving signal.

10. The information communication apparatus as claimed in claim 2, wherein the information received by the information communication unit includes voice communication data from an external terminal and music data delivered from an external source.

11. The information communication apparatus as claimed in claim 10, wherein the music reproduction unit outputs the music as the audio signal based on the music data delivered from the external source.

12. The information communication apparatus as claimed in claim 10, further comprising a memory for storing the music data.

13. The information communication apparatus as claimed in claim 12, wherein the music reproduction unit generates and outputs the music as the audio signal based on the music data in the memory.

14. The information communication apparatus as claimed in claim 1, further comprising a speaker for outputting the audio signal.